REMARKS

Reconsideration and allowance are respectfully requested in light of the above amendments and the following remarks.

Applicant acknowledges with appreciation the indication in the Office Action of allowable subject matter in claims 2 and 9.

Claims 1-9 have been cancelled in favor of new claims 10-23, which better define the subject matter Applicant regards as the invention. Support for the features recited in claims 10-14 is provided by original claims 1-9, Figs. 5-8, and the specification on page 9, lines 13-19.

Claims 1, 3, and 8 were rejected, under 35 USC §102(b), as being anticipated by Blanchard et al. (US 5,764,690). Claims 4-7 were rejected, under 35 USC §103(a), as being unpatentable over Blanchard in view of Sayeed (US 6,594,320). Insofar as these rejections may be deemed applicable to new claims 10-14, Applicant respectfully traverses.

New claim 10 includes features of claim 1 and allowable claim 2 and recites:

> *A radio reception apparatus, comprising:*
> *a demodulator that performs selectively (i) coherent detection of a received signal and (ii) delay detection of a received signal; and*
> *a selector that selects one of said coherent detection and said delay detection to be applied to the received signal by said demodulator according to: (a) a relationship between a communication speed of a packet*

and a channel variation speed, (b) the length of the packet, or (c) said channel variation speed.

The individual or combined disclosures of Blanchard and Sayeed fail to disclose or suggest the feature recited in claim 10 of a selector that selects one of coherent detection and delay detection to be applied to a received signal by a demodulator according to: (1) a relationship between a communication speed of a packet and a channel variation speed, (2) the length of the packet, or (3) the channel variation speed. Element (1) is similar to the feature recited in allowable claim 2. Elements (2) and (3) provide alternative criteria for selecting the form of detection to be applied to the received signal.

By contrast to the claimed structure, Blanchard discloses in Fig. 1 a selector 28 that provides a message indicator signal 29 that indicates whether a correlation level appearing at the output of at least one of demodulators 22-1 through 22-N exceeds a predetermined threshold, thereby indicating that a message is present (Blanchard col. 3, lines 40-46). Additionally, selector 28 provides a plurality of N weighted signals (W1-WN) to multipliers 23-1 through 23-N, whereby the weight of each signal is calculated based upon the estimated signal quality of the corresponding demodulated signal (col. 3, lines 47-53).

Blanchard's selector does not select a type of detection to apply to a received signal, as required by claim 10. As may be determined by inspection of Blanchard's Fig. 1, selector 28 does not provide a signal to demodulators 22-1 through 22-N. Therefore, selector 28 cannot control the operation of these demodulators in any way. Instead, demodulators 22-1 through 22-N demodulate incoming signals independently of selector 28's operation and each demodulated signal is provided to selector 28 and a corresponding one of multipliers 23-1 through 23-N. Moreover, since Blanchard does not disclose a way to select between detection types, it necessarily follows that Blanchard cannot disclose making a selection based upon the claimed criteria of: (1) a relationship between a communication speed of a packet and a channel variation speed, (2) the length of the packet, or (3) the channel variation speed.

With regard to Sayeed's disclosure, the Office Action cites this reference only for teaching the combination of modulators and an IFFT processor (Office Action page 4, lines 5, 6, 19, and 20; page 5, lines 12 and 13; and page 6, lines 5 and 6). As a result, this reference adds nothing to Blanchard's disclosure with regard to the above-described features of claim 10.

Accordingly, Applicant respectfully submits that the individual or combined disclosures of Blanchard and Sayeed do not

disclose or suggest the subject matter defined by claim 10 of a selector that selects one of coherent detection and delay detection to be applied to a received signal by a demodulator according to: (1) a relationship between a communication speed of a packet and a channel variation speed, (2) the length of the packet, or (3) the channel variation speed. Therefore, allowance of claim 10 and all claims dependent therefrom is warranted.

Claim 14 similarly recites the subject matter of apparatus claim 10, but with respect to a method claim. Thus, claim 14 is allowable for similar reasons that claim 10 distinguishes over the applied references.

Independent claim 11 recites:

> *A radio transmission apparatus, comprising:*
> *a modulator that performs (i) a first modulation and (ii) a second modulation of a transmission signal to produce a first modulated signal and a second modulated signal, respectively, said first modulation corresponding to coherent detection and said second modulation corresponding to delay detection; and*
> *a selector that selects one of said first and second modulated signals for transmission by said radio transmission apparatus, wherein:*
> *said selector selects between said first and second modulated signals according to: (a) a relationship between a communication speed of a packet and a channel variation speed, (b) the length of the packet, or (c) said channel variation speed.*

The individual or combined disclosures of Blanchard and Sayeed fail to disclose or suggest the features recited in claim

11 of: (1) a modulator that performs a first modulation, corresponding to coherent detection, and a second modulation, corresponding to delay detection, of a transmission signal to produce a first modulated signal and a second modulated signal and (2) a selector that selects between the first and second modulated signals according to: (a) a relationship between a communication speed of a packet and a channel variation speed, (b) the length of the packet, or (c) the channel variation speed.

Blanchard's Figs. 1-9 neither disclose a transmission apparatus nor one that performs two types of modulation on a transmission signal, as defined by feature (1) above. Regarding feature (2) above, Blanchard's selector 28 does not select one of two modulated signals for transmission by a radio transmission apparatus.

As described in connection with claim 10, the Office Action cites Sayeed only for teaching the combination of modulators and an IFFT. Sayeed's teaching adds nothing of relevance with regard to the above-mentioned features distinguishing claim 11 from Blanchard.

Accordingly, Applicant submits that the individual or combined disclosures of Blanchard and Sayeed do not disclose or suggest the subject matter defined by claim 11 of (1) a modulator that performs a first modulation, corresponding to coherent

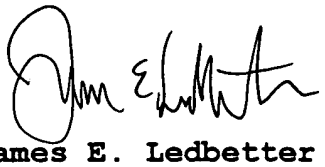
detection, and a second modulation, corresponding to delay detection, of a transmission signal to produce a first modulated signal and a second modulated signal and (2) a selector that selects between the first and second modulated signals according to: (a) a relationship between a communication speed of a packet and a channel variation speed, (b) the length of the packet, or (c) the channel variation speed. Therefore, allowance of claim 11 and all claims dependent therefrom is warranted.

New claim 12 recites similar subject matter to that of claim 11; i.e., claim 12 recites a modulator and a selector, wherein the modulator performs selectively (i) a first modulation corresponding to coherent detection and (ii) a second modulation corresponding to delay detection, respectively, with respect to a signal to be output by said selector for transmission, wherein the selector selects between the first modulation and the second modulation for the signal to be output by the selector for transmission, according to: (a) a relationship between a communication speed of a packet and a channel variation speed, (b) the length of the packet, or (c) said channel variation speed.

In view of the above, it is submitted that this application is in condition for allowance and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,



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